

## REMARKS

As a preliminary matter, Applicant has amended pages 1 and 8 of the specification, and claims 5, 8, 29, and 38 to address each of the Examiner's objections and 35 U.S.C. §112 2<sup>nd</sup> ¶ rejections. Further, claims 16 and 41 have been cancelled without prejudice as noted below. In light of these amendments, Applicant respectfully requests the Examiner withdraw the objections and the §112 2<sup>nd</sup> ¶ rejections.

The Examiner rejected claims 1-43 under 35 U.S.C. §112 1<sup>st</sup> ¶ specifically alleging that claims 1, 13, 25, and 36 are "single means claims" that are not adequately enabled by the specification. To support this position, the Examiner cites *In re Hyatt*, 708 F.2d 712, 218 USPQ 195 (Fed. Cir. 1983). Applicant respectfully disagrees. The claims of the present invention are not "single means claims." It appears the rejection is based on a misunderstanding of *In re Hyatt*. In *Hyatt*, the court held the claim at issue invalid under §112 1<sup>st</sup> ¶ because it constituted a "single means claim." However, the claim at issue in *Hyatt* comprised only a single element that was drafted in a "means-plus-function" format. The claim recited a "means", a statement of function, and nothing else. Because of the means-plus-function format, the court found the claim to invoke the provisions of 35 U.S.C. §112 6<sup>th</sup> ¶ and to cover every conceivable means for achieving the function. In the present application, however, none of the claims invoke §112 6<sup>th</sup> ¶ either implicitly or explicitly and they should never be viewed as such.

The claimed invention is enabled. The specification is 23 pages long. There are no less than eight (8) different examples describing the present invention in terms of eight (8) different embodiments. Each example is clearly and concisely explained at the bit level using figures, verbiage, and equations. The specification describes two different trellises, and explains each of the components and their functionality at a level of detail that is more than adequate for one who is skilled in the art to understand. To allege that the specification fails to adequately enable the claims, or that the claims constitute "single means claims," is simply incorrect. The

§112 1<sup>st</sup> rejection of claims 1, 13, 25, and 36 fails as a matter of law, and Applicant respectfully requests the Examiner withdraw the rejection.

The Examiner further rejected claims 37-40 under 35 U.S.C. §112 1<sup>st</sup> citing that the claimed “demodulator” is not supported by the drawings. The Examiner further “assigns” these claims to cover the embodiment of Figure 4. However, this arbitrary assignment of these claims to Figure 4 is improper. Figure 4 may show an equalizer, however, the specification clearly states that “equalizer 502 could be replaced by a separate demodulator and differential decoder.” *Spec.*, pg. 11, ll. 4-5. Figures 1 and 2, for example, both show a demodulator. As such, multiple figures illustrate a demodulator and these claims need not be directed solely to the embodiment of Figure 4. Therefore, the §112 1<sup>st</sup> rejection fails and Applicant respectfully requests its withdrawal.

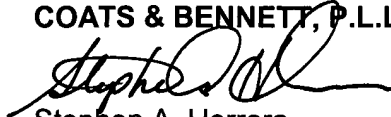
Finally, the Examiner rejected independent claims 1, 13, 25, and 36 under 35 U.S.C. § 102(b) as being anticipated by the patent to Chouly. In response, Applicant has amended each of these claims without adding new matter. Particularly, claim 1 has been amended to include the subject matter of dependent claims 2-4. Claim 13 has been amended to include the subject matter of dependent claims 14 and 16-17. Claim 25 has been amended to include the subject matter of claims 26-28, and claim 36 has been amended to include the subject matter of claims 41-42. Each of claims 2-4, 14, 16-17, 26-28, and 41-42 have been cancelled without prejudice, while claims 5, 8, 18-19, 29, and 38 have been amended to ensure that their language and dependencies comports with their respective amended independent claims. Applicant respectfully notes that none of claims 4, 17, 28, or 42 stand rejected over any cited art, but rather, were merely rejected for reasons that have been corrected or addressed as noted above.

In light of the foregoing amendments and remarks, Applicant respectfully requests the allowance of all pending claims 1, 5-13, 15, 18-25, 29-40, and 43.

Respectfully submitted,

**COATS & BENNETT, P.L.L.C.**

By:



Stephen A. Herrera  
Registration No. 47,642

January 7, 2005

P.O. Box 5  
Raleigh, NC 27602  
Telephone: (919) 854-1844